

ABSTRACT

The error at work have relate to human practically caused by unsafe action and precondition for unsafe action. Human Error Assessment and Reduction Technique (HEART) is a method to analyze the occurrence of human error and human reliability in performing the work. This method is also used to prevent accidents caused by human error. This study aims to analyze the causes of human error on the job at the Workshop Machine Tools, Divisi Harkan PT. PAL Indonesia (Persero).

This study using the observational descriptive method with a cross-sectional approach. Sample size is the total study population, amount to 12 respondents. The variables in this study are characteristic workshop workers, occupational accidents, unsafe actions, unsafe precondition for action, human error, Hierarchical Task Analysis, Generic Task Types (GTTS), Production Error Conditioning (EPCs), Assessed Proportion of Affect (APOA), Human Error Probability, Probability of Failure (Fi), Human Reliability (Ri), Reliability Systems Work (Rm).

The results showed that the high score of Human Error Probability (HEP) in the use of Personal Protective Equipment (HEP = 0.2016). This is supported by as many as 66.7% of workers did not wear Personal Protective Equipment when doing their job. This is because the mismatch risk envisioned by workers with the actual risk and poor information submitted. Most errors found in the operation of the honing machines. Overall reliability of the system work (Rm) the operation of the machine is included in the low category ($R_m \leq 0.5$).

The conclusion can be drawn is reliability workshop workers to perform safe work procedures when operating machinery included in the low category. Therefore necessary to design improvements and worker training to improve the reliability of the workshop.

Keywords: human error, human reliability, HEART, cause of human error